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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,091	12/04/2000	Akira Oosawa	Q61255	7543

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EXAMINER

TABATABAI, ABOLFAZL

ART UNIT PAPER NUMBER

2625

DATE MAILED: 02/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/728,091

Applicant(s)

OOSAWA, AKIRA

Examiner

Abolfazl Tabatabai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **Response to Amendment/Arguments**

1. Applicant's arguments, (pages 7-11), filed on December 5, 2003 with respect to the rejection(s) of claim(s) 1-25 under Li et al (U S 6,594,378 B1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Buytaert et al (U S 5,757,952) and Madore et al (6,144,873).

## **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 and 17-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Buytaert et al (U S 5,757,952).

Regarding claim 1, Buytaert discloses an image display method for displaying two or more images of an identical object to be compared (column 4, lines 59-67 and column 7, lines 29-38) wherein the two or more images are displayed together in a row or a column with positions of a structural feature area of the identical object in the two or more images aligned horizontally or vertically (column 6, lines 33-58).

Regarding claim 2, Buytaert discloses an image display, wherein each of the two or more images of the identical object to be compared is a radiation image for medical use (column 4, lines 59-62 and column 5, lines 46-48).

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Regarding claim 3, Buytaert discloses an image display, wherein each of the two or more images of the identical object to be compared is an original image (column 6, lines 28-37).

Regarding claim 4, Buytaert discloses an image display, wherein the two or more original images are taken at different points in time (column 9, lines 62-67).

Claim 5, is similarly analyzed as claim 1 above.

Claim 6, is similarly analyzed as claim 4 above.

Regarding claim 7, Buytaert discloses an image display, wherein each of the two or more images is added onto an image display one by one (column 6, lines 41-42 and column 7, lines 8-11).

Claim 8, is similarly analyzed as claim 1 above.

Claim 9, is similarly analyzed as claim 2 above.

Claim 10, is similarly analyzed as claim 3 above.

Claim 11, is similarly analyzed as claim 4 above.

Claim 12, is similarly analyzed as claim 5 above.

Claim 13, is similarly analyzed as claim 6 above.

Claim 14, is similarly analyzed as claim 7 above.

Regarding claim 15, Buytaert discloses an image display method wherein the two or more images physically occupy different areas of a display when the two images are simultaneously displayed (column 4, lines 55-58).

Claim 17, is similarly analyzed as claim 1 above.

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Regarding claim 18, Buytaert discloses an image display apparatus wherein said image display means conducts a subtraction processing to derive a subtraction image from the two or more images (column 6, lines 33-38).

Regarding claim 19, Buytaert discloses an image display method wherein each of said two or more images comprises header information wherein said header information comprises:

an ID number which is unique to an object (column 4, lines 63-67);

a code representing an imaged site of the object (column 5, lines 51-54);

an orientation information of the object upon imaging (column 4, lines 15-17);

and,

a date of imaging (column 5, lines 51-54).

Claim 20, is similarly analyzed as claim 19 above.

Claim 21, is similarly analyzed as claim 1 above.

Regarding claim 22, Buytaert discloses an image display method wherein said two or more images are displayed together in a row or column are arranged side by side at a given time (column 4, lines 59-63).

Claim 23, is similarly analyzed as claim 15 above.

Claim 25, is similarly analyzed as claim 17 above.

### **Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buytaert et al (U S 5,757,952) in view of Madore et al (U S 6,144,873).

Regarding claim 16, Buytaert is silent about the specific details regarding an image display method wherein a first of the two images represents the object at a first time, and a second of the two objects represents the object at a second time different from the first time.

In the same field of endeavor, however, Branson discloses a method of efficient data encoding in dynamic MRI comprising a first of the two images represents the object at a first time, and a second of the two objects represents the object at a second time different from the first time (column 14, lines 34-38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a first of the two images represents the object at a first time, and a second of the two objects represents the object at a second time different from the first time as taught by Madore in the system of Some because Madore provides Some a system which transfers information from k axis to t axis, thereby acquiring a smaller. Denser k-t space with reductions in data acquisition time of the temporal image frame and the reorganization of the k-t space can be translated into a reduction of the

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total acquisition time, an improvement of the spatial and temporal resolution, or increase in the spatial coverage.

Claim 24, is similarly analyzed as claim 16 above.

### **Other prior art cited**

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U. S. Patent (6,101,238) to Murthy et al is cited for system for generating a computed x-ray image for diagnosis.

U.S. Patent (5,466,689 B1) to MacMahon is cited for method and system for digital radiography.

U.S. Patent (5,717,735) to Ramsdell et al is cited for medical radiological apparatus including optical crosshair device for patient positioning and forearm and spinal positioning.

U.S. Patent (5,092,335) to Le Bihan is cited for method for imaging of intra-voxel movements by NMR in a body.

U.S. Patent (4,694,479) to Bacskai et al is cited for video-radiographic process and equipment for a quality controlled weld seam.

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**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (703) 306-5917.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mehta Bhavesh M, can be reached at (703) 308-5246. The fax phone number for organization where this application or proceeding is assigned is (703) 872-9306.

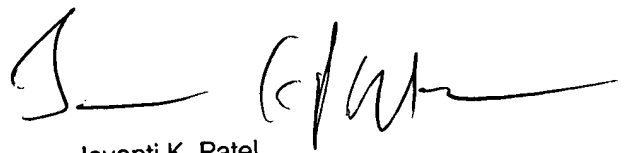
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Group Art Unit 2625

February 17, 2004



Jayanti K. Patel  
Primary Examiner